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**(54) METHOD OF SHORT
CIRCUIT PROTECTION
AND DEVICE FOR SHORT
CIRCUIT PROTECTION
FOR ELECTRONIC
EQUIPMENT**

(57) Abstract:

PROBLEM TO BE SOLVED: To
stop supply of electric power with a
low-cost configuration by positively
detecting a short circuit in a load
circuit in each of plural power supply

lines.

SOLUTION: A device for short circuit protection is provided with transistors 31, 41 for controlling the supply of electric power and detecting circuits 35, 43 for detecting the drop in voltage level caused by a short circuit for each of plural power supply lines. The transistor 31 is controlled by a microcomputer 70, based on a signal from the detecting circuit 35 to stop the supply of electric power, if the voltage level drops. The detected signal from the detection circuit 43, which is treated as a bit signal of parallel signals, is converted into a serial signal by a parallel-serial conversion circuit 50 and is supplied to the microcomputer 70. The transistor 41 is controlled, based on the serial signal to control the supply of electric power. The microcomputer 70 is powered by a back-up power supply circuit 60 so that protective operation can be performed correctly, even if a short circuit occurs.

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